

Air Force

SBIR Advantage

Offering a brief look at the vital research and development contributions made by the Small Business Innovation Research (SBIR) Program in direct support of the Air Force mission.

4th
Quarter
2001

Air Force SBIR Update

Small Business Technology Transfer (STTR) Program:

A Sister Program to the Small Business Innovation Research (SBIR) Program

In the mid 1990s, Congress authorized the Small Business Technology Transfer (STTR) program as another tool to help small businesses develop their technologies with hopes that it will lead to commercialization. As you read this article, Congress is working on a bill to extend STTR through to 2009.



Stephen Guilfoos
Air Force SBIR
Program Manager

study for the small business to take their idea and flesh it out enough to show they will be able to accomplish

Just like SBIR, STTR has three phases. Phase I is the conceptual feasibility

phase II. Phase II is the concept development. In Phase II the small business will develop their technology to at least demonstrate that their concept works – that it does what they proposed it could do. Ideally this would be a well-defined deliverable product or service.

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SBIR Tech Issues

Tech Issues is intended for personnel directly involved in the operation and support of the AF SBIR program.

The SBIR Funding Process

Each year SBIR funds are committed, obligated, and expended in a dizzying surge of activity. It involves

more than simply yelling, "Show me the money." The more familiar all SBIR team members are with



the overall funding process, the better the SBIR

program operates as advertised. What follows is

a brief review of the SBIR funding process.

Since SBIR is not an appropriated program, the funds that are received by the program come from monies taxed from other Air Force extramural research and development (R&D) programs. "Extra-mural" refers those monies used to contract out.

Even though the Air Force's fiscal year runs from 1 October through 30 September, most organizations receive their program authority around the middle of October. SBIR program authority, and the subsequent budget authority, is not generated from the Secretary of the Air Force's financial management offices until around the mid-January through early February time frame. You may wonder, "Why so long!?" The basic answer is that our SBIR funds are amongst the last to be distributed because the tax is calculated on the

"final" budget numbers for those taxed R&D program elements.

While SBIR funds may be committed and obligated anytime within a two-year period, the AF SBIR Program Management Office expects to see the Air Force obligation rate at 95% by the end of the first year. With this in mind, program managers only have a few months to make their selections of how many Phase I and II proposals they can award. In large measure this is based upon the extent of mortgages of past year Phase II contracts plus not knowing exactly what their budget authority will be from the program authority received.

Once program managers have made their selections of which new Phase I and II proposals they want to award contracts, the

contracting officers only have a few months to negotiate and award the contract.

Even though SBIR funds are "2-year" monies, the SBIR funds can be expended up to five years after the funds have been obligated. That means the funds that are received for FY 2002 can be expended (or used to pay the contractor) through 2008.

Every so often we experience a few problems involving the receipt of cancelled year bills and contracts extending past their allowable time frame. In spite of these challenges, the local Air Force SBIR program managers, contracting officers, and financial personnel have done an excellent job ensuring contracts are both expeditiously signed and then closed out on time.

SBIR Facts & Figures

FY00 DoD STTR Annual Report Summary

	STTR Budget	# Topics	#Phase I Proposals	Phase I Awards	Phase II Awards
Army	6,906,000	8	50	17	11
Navy	7,526,000	8	30	18	14
Air Force	11,092,702	18	177	24	21
DARPA	2,522,129	9	45	9	7
BMD0	3,386,943	1	47	14	2
All DoD	31,433,774	44	349	82	55

Source: DoD STTR Annual Report

AF SBIR Impact

Automated Support for Intelligence Analysts

Air Force Requirement

The Air Force Research Laboratory (AFRL) is searching for systems and processes to provide automated support to intelligence analysts as they face a growing number of complex challenges. These challenges include:

1. The exponential increases in the amount of information available.
2. Sub-specialization among intelligence analysts making it more difficult to share knowledge quickly and precisely.
3. New data sources go "on-line" daily. Existing sources change frequently.
4. Intelligence analysts gather and analyze information against tight deadlines.
5. Need for greater collaboration for accurate analysis.

SBIR Technology

LGA used the Air Force SBIR Program to develop "Dynamic Assignment of Links for the Intelink" or DALI. As part of this project LGA investigated technologies, researched theoretical concepts, and developed a solution addressing the needs

Payoff

Several federal agencies/organizations are presently using or preparing to use an enhanced version of DALI. The agencies include Interlink Service Management Center (ISMC), National Imagery and Mapping Agency (NIMA), and three other organizations within the Intelligence Community. LGA also has contracts pending signature with the American Association of Pharmaceutical Scientists and Wake Forest University.

Technology Transfer/Commercialization

Commercial interest in the technology continues to grow. The National Cancer Institute (NCI) and pharmaceutical groups use the technology. The commercial product name was changed to "The ResearchPlace" to reflect LGA's primary market focus. Other areas have expressed interest in the technology, including banking, justice, education, and aerospace.

SBIR Partner

Lynne Gilfillan
Associates, Inc. (LGA)
Fairfax, VA

Employees

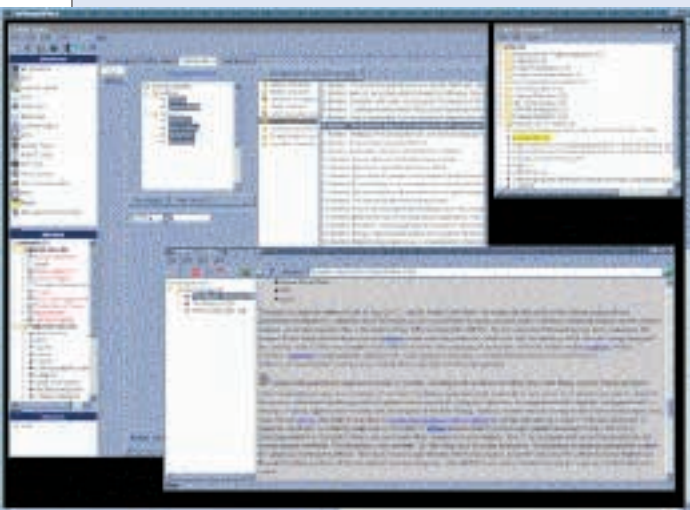
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"DALI, developed by LGA, is beneficial to the Air Force in that it enhances existing search technology to not only provide significantly preferable search results, but also supports the capability to embed searches within a complete research environment. Simultaneous queries to the Internet, electronic libraries, local/enterprise databases, Intranet(s), and/or secure networks (such as Intelink), will provide exhaustive, yet focused, information to assist in the development of topic-specific knowledge.

Users, situated at local and/or remote locations, will have the ability to effectively search, retrieve, organize, categorize, analyze, collaborate, and selectively share both source materials and finished products seamlessly and systematically."

Stan Borek
AFRL/IFED
Rome, NY



Air Force SBIR Update

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The Air Force funds STTR by taxing the Air Force's extramural research and development budget at the rate of .15%. Presently this represents an overall STTR budget of just under \$12M each year. Phase I is limited to \$100,000 and can take up to one year. Phase II is limited to \$500,000 and can take up to two years. Phase III refers to the next step in the technology development and application and is the sole responsibility of the small business. Phase III is accomplished with non-STTR funds.

Differences

There are some significant differences between STTR and the SBIR programs. The most important distinction is that STTR

mandates the small business to team with a research institution. This teaming requires the research institution to accomplish between 30% and 60% of the work. Research institutions include non-profit research institutions, universities, as well as federally funded research and development centers (FFRDCs).

Another difference is that presently the Air Force focuses STTR on basic research. As such the Air Force Office of Scientific Research (AFOSR) manages the execution of the program for the Air Force Research Laboratory.

The STTR solicitation takes place during the late winter and early spring with proposals due no later than the second Wednesday in April each year.

Expected Changes

Congress, in reauthorizing STTR, intends to increase the Phase II dollar limits to \$750,000. Another change is the potential increase of the tax rate on the



extramural R&D budgets from .15% to .3%. This would effectively double the STTR budget from \$11+ M to around \$23M.

Benefits

One of the biggest benefits to STTR is the requirement that the small business work with a research institution. This provides an excellent teaming arrangement that takes advantage of the expertise that lies outside the normal business community.



**Air Force
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Science and Technology for Tomorrow's Aerospace Forces

Air Force SBIR Advantage

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The goal of the Air Force SBIR Program is to serve the technology needs of Air Force warfighters. It accomplishes its mission as part of the Air Force Research Laboratory's (AFRL) integrated research and development (R&D) team. AFRL's mission is leading the discovery, development, and integration of affordable warfighting technologies for our aerospace forces.

SBIR Advantage is published quarterly by the Air Force SBIR Program office. This publication offers an overview of AF SBIR issues and information. The purpose of *SBIR Advantage* is to provide Air Force, DoD, and other government leadership with additional insight into the vital contributions made by the SBIR program to Air Force R&D.

SBIR Advantage is available online at: www.afrl.af.mil/sbir

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